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APR 11 2007

USSN 10/762,119

Attorney Docket No.: 2000-0062-03

Remarks

Claims 1-4, 8-11 and 14-41 are pending this application. Claims 1, 2, 4, 10, 16, 19, 21-23, 27-32 and 36-41 stand rejected. Claims 3, 8, 9, 11, 17, 18, 20, 24-26, and 33-35 are objected to.

Applicant has amended Claim 1 as requested by the Examiner, such that on the last line of the claim, "said test laser beam" recites "said laser beam" so as to correct the informality. Applicant has also amended claims 21, 23, and 32, as discussed below. Claims 5, 6, 7, 12-15, 24, 26, and 35 have been cancelled.

Claims 1-2, 4, 10, 16, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Admitted Prior Art (hereinafter, *APA*) in view of U.S. Patent No. 6,813,004 to Horikoshi et al. (hereinafter, *Horikoshi*). Applicant agrees with the Office Action that *APA* "lacks a fast beam deflection monitoring means to monitor deflection of said laser beam and a feedback control means for controlling said tuning means based on signals from said beam deflection monitoring means." Office Action, page 3. The Office Action uses *Horikoshi* to make up for this deficiency. In combining the references, the Office Action states that "it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide *APA* what is taught by *Horikoshi* et al. in order to control the gas discharge laser properly (col. 14, 1:55-59)." Office Action, page 3.

To establish a *prima facie* case for obviousness, the combined prior art references must teach or suggest all the claim limitations. See, MPEP 2142-43. Applicant contends that the combination of *APA* and *Horikoshi* fails to teach or suggest Applicant's claimed feature of "a fast beam deflection monitoring means to monitor deflection of said laser beam." *Horikoshi* indicates "an integrator sensor 46 as the first optical sensor structured of a photoelectric conversion device, and a reflected light monitor 47 are respectively arranged on the optical paths vertically deflected on either sides by the beam splitter 26." Although *Horikoshi* indicates that the laser beam is deflected by a beam splitter to the sensor, *the sensor does not monitor beam deflection*. The integrator sensor 46 of *Horikoshi* is used to "detect pulse emissions from the excimer laser light source." Col. 16, lines 16-25 (emphasis added). Applicant contends that *Horikoshi* merely detects emissions from an excimer laser

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light source so as to generate an input signal for the main controller, which controls the amount of exposure of excimer laser light to wafers. See, e.g., col. 16, lines 52-57 and col. 18, lines 46-65. *Horikoshi* is silent on monitoring beam deflection with a fast beam deflection monitoring means as in Applicant's claimed invention. Accordingly, Applicant submits that the combination of *APA* and *Horikoshi* fails to teach or suggest each element of Applicant's claimed invention, and therefore a *prima facie* case of obviousness has not been made. Applicant submits that claims 1-2, 4, 10, 16, and 19 are allowable for at least the above reasons. In addition, Applicant submits claims 3 and 8, which depend from Claim 1, as well as Claims 9, 11, 17, 18, and 20, which depend from Claim 4, are similarly allowable.

Claims 21-23, 27-29, 30-32, and 36-41 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *APA* in view of *Horikoski* and in further view of U.S. Patent No. 5,991,324 to Knowles et al. (hereinafter, *Knowles*).

Applicant has amended Claim 21 so as to incorporate the features of Claim 24, which depended from Claim 21. Claim 24 was objected to in the Office Action as being dependent on a rejected base claim, but the Office Action stated it would be allowable if rewritten in independent form. Applicant submits that amended Claim 21 is accordingly in condition for allowance. Applicant further submits that Claim 27, which depends from Claim 21, is also allowable.

Applicant has amended Claim 23 so as to incorporate the features of Claim 26, which depends from Claim 23. Claim 26 was objected to in the Office Action as being dependent on a rejected base claim, but the Office Action stated it would be allowable if rewritten in independent form. Applicant submits that amended Claim 23 is accordingly in condition for allowance. Applicant further submits that Claim 29, which depends from Claim 23, is also allowable.

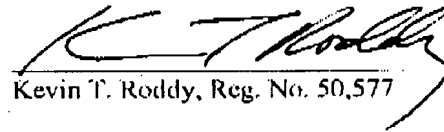
Applicant has amended Claim 32 so as to incorporate the features of Claim 35, which depends from Claim 32. Claim 35 was objected to in the Office Action as being dependent on a rejected base claim, but the Office Action stated it would be allowable if rewritten in independent form. Applicant submits that amended Claim 32 is accordingly in condition for allowance. Applicant further submits that Claims 38 and 41, which depends from Claim 32, are also allowable.

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Applicant submits that Claims 22, 30, and 31 which include the feature of fast beam deflection monitoring for monitoring deflection of said discharge laser beam are allowable for at least the same reasons as discussed above in connection with Claim 1. Applicant further submits that Claims 25, 28, 33, 34, 36, 37, 39, and 40 are in condition for allowance for at least the same reasons.

Applicant does not believe that any fees are due in regard to the prosecution of this amendment, but in the event that any such fees are due the Commissioner is hereby authorized to charge Cymer, Inc.'s Deposit Account No. 03-4060 for any such fees.

Respectfully submitted,


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